

AMENDMENTS

In the Claims:

1. (Previously Presented) A method for transmitting signals in a random access channel in a radio communication system having a plurality of subscriber stations, the method comprising:

using the random access channel in an uncoordinated manner; and

determining an attenuation value for a respective transmission path for each subscriber station;

wherein the subscriber stations transmit the signals in the random access channel at transmitting powers which are greater than transmitting powers corresponding to the respective previously determined attenuation values by arbitrary amounts, such that the transmitting power of each of the plurality of subscriber stations is not identical.

2. (Previously Presented) The method as claimed in claim 1, wherein signal transmissions of the subscriber stations relate to certain applications, and a higher priority is allocated to the applications relating to the signal transmissions of a second group of subscriber stations before the signal transmission, than to the applications relating to the signal transmissions of a first group of subscriber stations.

3. (Previously Presented) The method as claimed in claim 2, wherein the subscriber stations transmit signals which relate to a request for allocation of radio resources, an acknowledgement or messages for updating the location of subscriber stations.

4. (Previously Presented) The method as claimed in claim 1, wherein before the signal transmission, a higher priority is allocated to a second group of subscriber stations compared with a first group of subscriber stations.

5. (Previously Presented) The method as claimed in claim 1, wherein the signal transmissions of the subscriber stations relate to certain services, and a higher priority is allocated to

the services relating to the signal transmissions of a second subscriber station, before the signal transmission, than to the services relating to the signal transmissions of a first subscriber station.

6. (Canceled)

7. (Previously Presented) The method as claimed in claim 1, wherein the increase in transmitting power is changed with retransmission of the signal by a second subscriber station.

8. (Previously Presented) The method as claimed in claim 1, wherein the attenuation values for the transmission path are determined by evaluating the received power of a control channel.

9. (Previously Presented) The method as claimed in claim 1, wherein the channel is a broadband channel and is arranged in accordance with a TDD or FDD mode of a UMTS mobile radio system.

10. (Previously Presented) A subscriber station for a radio communication system which has a random access channel which is used in an uncoordinated manner by subscriber stations, comprising:

- a transmitting device to transmit signals in the random access channel;
- a unit to determine an attenuation value for a respective transmission path; and
- a control device to set transmit power for the signal transmission to a value which is greater than a transmitting power corresponding to the previously determined attenuation value.

11. (Currently Amended) A method for transmitting signals, comprising:

- transmitting signals in a random access channel;
- determining an attenuation value for a respective transmission path; and
- setting a transmitting power for the transmitting of the signals at a value which is greater than a transmitting power corresponding to the previously determined attenuation value.

12. (Previously Presented) The method as claimed in claim 1, wherein each of a first group of subscriber stations transmits the signals in the random access channel at transmitting powers which correspond to the previously determined attenuation values.